

AMENDMENTS TO THE CLAIMS:

Please amend the claims as follows, substituting any amended claim(s) for the corresponding pending claim(s):

1. (Currently Amended) A method of evaluating data communication routing paths for use in routing time sensitive communications over the paths, comprising the steps of:

evaluating whether the quality of data transmission over a first type communication path is acceptable;

determining the importance of a plurality of time sensitive communications; and

switching an in-progress time sensitive communication from the first type communication path to a second type communication path based on the determined importance of the time sensitive communication if the quality of transmission is not acceptable.

2. (Original) The method of claim 1 wherein said step of switching comprises switching said time sensitive communication from an internet network to a circuit switched telephone network.

3. (Original) The method of claim 1 wherein said time sensitive communication includes audio data.

4. (Original) The method of claim 3 wherein said time sensitive communication is a telephone call.

5. (Original) The method of claim 1 wherein said time sensitive communication is a video communication.

6. (Original) The method of claim 1 further comprising the step of switching an in-progress time sensitive communication from the second type communication path to the first type communication path if the quality of transmission over the first type communication path is acceptable.

7. (Original) The method of claim 6 wherein said first type communication path is a internet protocol network and said second type communication path is a circuit-switched network.

8. ~~(Canceled)~~

9. (Currently Amended) The method of claim 1 8 wherein said step of switching comprises switching time sensitive communications determined to be more important to the second type communication path before less important time sensitive communications are switched.

10. (Original) The method of claim 9 further comprising reserving a certain amount of communication conduits of the second type communication path for selected higher importance time sensitive communications.
11. (Original) The method of claim 10 wherein said time sensitive communications are telephone calls.
12. (Original) The method of claim 1 wherein said step of evaluating comprises evaluating the transmission of data packets across the first type transmission path to determine if the quality of transmission is acceptable.
13. (Original) The method of claim 12 wherein data packet delay is evaluated.
14. (Original) The method of claim 13 wherein data packet loss is evaluated.
15. (Original) The method of claim 1 wherein the first and second type communication paths are packet networks.
16. (Original) The method of claim 15 wherein the second type network is an ATM network.

17. (Original) The method of claim 15 wherein the first type network is an ATM network.

18. (Currently Amended) A method of evaluating data communication routing paths for use in routing time sensitive data over the paths, comprising the steps of:

evaluating whether the quality of data transmission over a first type communication path is acceptable;

identifying in-progress time sensitive communications that can be switched from a second type communication path to the first type communication path; and

switching a one of the identified in-progress time sensitive communications ~~an in-progress time sensitive communication~~ from a second type communication path to the first type communication path if the quality of transmission over the first type communication path is acceptable.

19. (Original) The method of claim 18 wherein said first type communication path is a packet network and said second type communication path is a circuit-switched network.

20. (Original) The method of claim 19 wherein said packet network is an internet protocol network.

21. (Original) The method of claim 18 wherein the first and second type network are packet networks.

22. (Currently ~~Amended~~) The method of claim 18 ~~17~~ wherein said time sensitive communication includes voice data.
23. (Original) The method of claim 22 wherein said time sensitive communication is a telephone call.
24. (Original) The method of claim 18 wherein said step of evaluating comprises evaluating the transmission of data packets across the first type communication path to determine if the quality of transmission is acceptable.
25. (Original) The method of claim 24 wherein data packet delay is evaluated.
26. (Original) The method of claim 25 wherein data packet loss is evaluated.

27. (Currently Amended) A computer readable medium, used in evaluating data communication routing paths for use in routing time sensitive communications over the paths, including instructions which when executed by a computer system, perform the steps of:

evaluating whether the quality of data transmission over a first type communication path is acceptable;

determining the importance of a plurality of time sensitive communications; and

switching an in-progress time sensitive communication from the first type communication path to a second type communication path based on the determined importance of the time sensitive communication if the quality of transmission is not acceptable.

28. (Original) The medium of claim 27 wherein said step of switching comprises switching said time sensitive communication from an internet network to a circuit switched telephone network.

29. (Currently Amended) A computer readable medium, used in evaluating data communication routing paths for use in routing time sensitive communications over the paths, including instructions which when executed by a computer system, perform the steps of:

evaluating whether the quality of data transmission over a first type communication path is acceptable;

identifying in-progress time sensitive communications that can be switched from a second type communication path to the first type communication path; and

switching a one of the identified in-progress time sensitive communications ~~an in-progress time sensitive communication~~ from a second type communication path to the first type communication path if the quality of transmission over the first type communication path is acceptable.

30. (Original) The medium of claim 29, wherein said time sensitive communication is switched from a circuit-switched network to an internet protocol network.

31. (Currently Amended) A computer-implemented method of evaluating data communication routing paths for use in routing time sensitive communications over the paths, comprising the steps of:

evaluating the quality of data transmission over a first type communication path;
determining the importance of a plurality of time sensitive communications; and
switching an in-progress time sensitive communication back and forth between the first type communication path and a second type communication path based on the quality of service of the first type communication path and on the determined importance of the time sensitive communication.

32. (Original) The method of claim 31 wherein said step of switching comprises switching said time sensitive communication back and forth between an internet network and a circuit switched telephone network.

33. (Original) The method of claim 32 wherein the quality of transmission of the internet network is evaluated for an acceptable quality for voice transmission.

34. (Original) The method of claim 33 comprising transmitting voice communication over the internet network when the quality of data transmission is acceptable, and transmitting the voice communication over the circuit switched network when the quality of transmission is not acceptable.

35. (Currently Amended) A method of evaluating telephone call routing paths for use in routing a telephone call, comprising:

determining whether the quality of telephone call transmissions along a first type telephone call transmission path meets preselected criteria;

identifying existing telephone calls that can be switched from a second type communication path to the first type communication path; and

automatically switching a one of the identified existing telephone calls ~~an existing telephone call~~ from a second type telephone call transmission path to the first type telephone call transmission path when the quality of service along the first type telephone call transmission path meets the preselected criteria.

36. (Original) The method of claim 35 wherein said switching step comprises switching voice data transmitted along the second type telephone call path to the first type telephone call path when the quality of service meets said preselected criteria.

37. (Original) The method of claim 36 wherein said determining step comprises sending test data packets along said first type telephone call path to determine the quality of service along the first type telephone call transmission path.

38. (Currently ~~Amended~~) The method of claim 35 ~~31~~ wherein said determining step comprises measuring data packet delay along said first type telephone call transmission path.
39. (Original) The method of claim 38 wherein said determining step comprises measuring data packet loss along said first type telephone call transmission path.
40. (Original) The method of claim 37 wherein said determining step comprises measuring data packet loss along said first type telephone call transmission path.
41. (Original) The method of claim 35 wherein said switching step comprises switching said existing telephone call from a circuit switched telephone call path to an internet protocol telephone call path.
42. (Original) The method of claim 35 further comprising the step of switching a telephone call that has been switched from said second type telephone call transmission path to said first type telephone call transmission path back to said second type telephone transmission call path when the quality of service along said first telephone call transmission path does not meet predetermined criteria.

43. (Original) The method of claim 42 wherein said first telephone call path is an Internet Protocol path and wherein said second type telephone call transmission path is a circuit switched telephone call path.

44. (Original) The method of claim 42 further comprising determining the number of telephone call lines available for switching telephone calls from said first type telephone call transmission path to said second type telephone path and switching only said number of calls from said first type telephone transmission call path to said second type telephone call transmission path.

45. (Original) The method of claim 44 further comprising prioritizing switching of telephone calls from said second type telephone call transmission path to said first type telephone call transmission path based on call switching criteria.

46. (Original) The method of claim 45 wherein said call switching criteria is based a telephone number associated with the calling or called party telephone line.

47. (Original) The method of claim 46 wherein certain telephone numbers are designated as higher priority telephone numbers for use in prioritizing said switching.

48. (~~Currently Amended~~) A computer-implemented method of evaluating telephone call routing paths for use in routing a telephone call, comprising:

determining whether the quality of telephone call transmissions along a first type telephone call transmission path meets preselected criteria;

determining the importance of a plurality of telephone call transmissions; and

automatically switching an existing telephone call from the first telephone call transmission path to a second telephone call transmission path based on the determined importance of the telephone call transmissions when the quality of service along the first type telephone call transmission path does not meet the preselected criteria.

49. ~~(Currently Amended)~~ A system for evaluating telephone call routing paths for use in routing a telephone call, comprising:

a processor operative to determine whether a voice communication occurring between a first location and a second location should be switched to either a first type of voice communication path or a second type communication path based on predetermined threshold values for the voice communication and on the importance of the voice communication; and

a switch for switching the voice communication to either the first or second type voice communication path based on the predetermined threshold values.

50. (Original) The system of claim 49 wherein said processor is operative to initiate switching said voice communication from said first type communication path to said second type communication path and wherein said processor is operative to initiate switching said voice communication from said second type communication path to said first type communication path.

51. (Original) The system of claim 50 wherein said first type communication path is an internet protocol based network and said second type communication path is a circuit switched communication path.

52. (~~Currently Amended~~) A system for evaluating data communication routing paths for use in routing time sensitive communications over the paths, comprising:

a processing unit that evaluates the quality of data transmission over a first type communication path and determines the importance of an in-progress time sensitive communication;
and

a switch that switches the an in-progress time sensitive communication back and forth between the first type communication path and a second type communication path based on the quality of service of the first type communication path and on the importance of the time sensitive communication.

53. (Original) The system of claim 52 wherein said switch switches said time sensitive communication back and forth between an internet network and a circuit switched telephone network.

54. (Original) The system of claim 53 wherein the evaluator unit evaluates the quality of transmission of the internet network for an acceptable quality for voice transmission.

55. (Original) The system of claim 54 wherein the switch transmits voice communication over the internet network when the quality of data transmission is acceptable, and transmits the voice communication over the circuit switched network when the quality of transmission is not acceptable.

56. (Original) The system of claim 55 wherein the first and second type networks are packet networks.

57. (Original) A method for switching between data transports paths for routing data, comprising the steps of:

receiving an indication of the quality of data transmission over a first type communication path; and

transmitting a signal that causes an in-progress time sensitive communication to be switched back and forth between the first type communication path and a second type communication path based on the quality of service of the first type communication path.

58. (Original) The method of claim 57 wherein the first type communication path is an internet network and the second type communication path is a circuit switched telephone network.

59. (Original) A method for switching between data transports paths for routing data, comprising the steps of:

receiving a signal that causes an in-progress time sensitive communication to be switched back and forth between the first type communication path and a second type communication path based on the quality of service of the first type communication path; and

relaying the signal to a switch that causes an in-progress time sensitive communication to be switched back and forth between the first type communication path and a second type communication path based on the quality of service of the first type communication path.

60. (Original) The method of claim 59 wherein the first type communication path is an internet network and the second type communication path is a circuit switched telephone network.

61. ~~(Currently Amended)~~ An apparatus for evaluating data communication routing paths for use in routing time sensitive communications over the paths, comprising:

means for evaluating the quality of data transmission over a first type communication path;

means for determining the importance of a plurality of in-progress time sensitive communications; and

means for switching an in-progress time sensitive communication back and forth between the first type communication path and a second type communication path based on the quality of service of the first type communication path and on the importance of the in-progress time sensitive communication.

62. (Original) The apparatus of claim 61 wherein said means for switching comprises switching said time sensitive communication back and forth between an internet network and a circuit switched telephone network.

63. (Currently Amended) An apparatus for evaluating data communication routing paths for use in routing time sensitive communications over the paths, comprising:

means for evaluating whether the quality of data transmission over a first type communication path is acceptable;

means for determining the importance of a plurality of in-progress time sensitive communications; and

means for switching an in-progress time sensitive communication from the first type communication path to a second type communication path if the quality of transmission is not acceptable, based on the importance of the in-progress time sensitive communication.

64. (Original) The apparatus of claim 63 wherein said step of switching comprises switching said time sensitive communication from an internet network to a circuit switched telephone network.

65. (Currently ~~Amended~~) An apparatus for evaluating data communication routing paths for use in routing time sensitive data over the paths, comprising:

means for evaluating whether the quality of data transmission over a first type communication path is acceptable;

means for identifying in-progress time sensitive communications that can be switched from a second type communication path to the first type communication path; and

means for switching a one of the identified in-progress time sensitive communications ~~an in-progress time sensitive communication~~ from a second type communication path to the first type communication path if the quality of transmission over the first type communication path is acceptable.

66. (Original) The apparatus of claim 65 wherein said step of switching comprises switching said time sensitive communication from an internet network to a circuit switched telephone network.
